

CLAIMS

1. A method for producing an alcohol and/or a ketone, wherein a raw material containing at least one alkene is contacted and reacted with an oxide catalyst in the presence of steam in a gas phase to produce an alcohol and/or a ketone corresponding to said alkene(s), which comprises satisfying the following requirements of (a) to (c):

(a) said oxide catalyst contains an oxide(s) of molybdenum and/or tin;

(b) said reaction is carried out under a condition where molecular oxygen is not fed and by the use of a system wherein said catalyst is circulated between a fluid bed reactor and a regenerator; and

(c) a stripper is provided on the way from said regenerator to said reactor.

2. The method according to claim 1, wherein a stripper is further provided on the way from said reactor to said regenerator.

3. The method according to claim 1 or 2, wherein said alkene(s) is 1-butene and/or 2-butene.

4. The method according to any one of claims 1 to 3, wherein the atomic ratio X of molybdenum to the sum of tin and molybdenum contained in said oxide catalyst ($(\text{Mo}/(\text{Sn} + \text{Mo}))$ where Mo is the number of molybdenum atoms in said oxide catalyst and Sn is the number of tin atoms in said oxide catalyst) is in the range of $0 \leq X < 0.50$.

5. The method according to any one of claims 1 to 3, wherein the atomic ratio X of molybdenum to the sum of tin and molybdenum contained in said oxide catalyst ($\text{Mo}/(\text{Sn} + \text{Mo})$ where Mo is the number of molybdenum atoms in said oxide catalyst and Sn is the number of tin atoms in said oxide catalyst) is in the range of $0.01 \leq X \leq 0.24$.